HANDBALL/RACQUETBALL CLUBS



AVERAGE CLASS C



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: These are shell-type structures which include handball or racquetball court facilities. The cost of individual facilities can vary greatly depending on the type of structure and its appointments, including the extent of the lounge, refreshment, exercise, shower and spectator areas. Court floor surfaces are hardwood. Courts are totally enclosed to include four walls and a ceiling surface. Court access is through a flush-mounted door generally found in a rear or a side wall. The lower-cost facilities are generally constructed with wood-framed siding or a rigid steel frame and an exterior cover of an insulated steel panel or a masonry bearing wall. They include adequate lighting and plumbing, dressing rooms and shower facilities. Plaster walls, used prima-

rily for low-cost, non-regulation courts, require a masonry wall backing. The better-quality structures include lounge and/or snack areas, health facilities, dressing rooms, showers and saunas. Spectator galleries are typically small and, in the best facilities, are located behind or above the back playing wall. When galleries are behind the court, portions of the rear wall surface are constructed with some type of safety glass. The second floor or mezzanine area should be included in the total floor area calculation.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Suitable office areas and lounge facilities.

NOT INCLUDED IN COSTS: Elevators, sprinklers, lockers, pools, exercise equipment, kitchen equipment or furnishings.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
С	Good	\$100.35	Brick or concrete, good entrance	Plaster or drywall, carpeting, good lounge, spectator courts, gym	Good sports lighting, restrooms, sauna, shower and locker rooms	Package A.C.
	Average	67.00	Brick or block, concrete panels, some ornamentation	Drywall, plain courts, limited viewing, snack bar area, exercise facilities	Adequate lighting, plumbing, showers, add for pool or spa	Package A.C.
D	Good	95.70	Brick veneer, best siding or stucco, trim, good entrance	Plaster or drywall, carpeting, good lounge, spectator courts, gym	Good sports lighting, restrooms, sauna, shower and locker rooms	Package A.C.
	Average	63.30	Good stucco or siding, some brick or stone trim	Drywall, plain courts, open viewing, snack bar area, exercise facilities	Adequate lighting, plumbing, showers, add for pool or spa	Package A.C.
s	Good	92.70	Insulated metal sandwich panels, steel frame, good entrance	Drywall, carpeting, good lounge, spectator courts, pro shop, gym	Good sports lighting, restrooms, sauna, shower and locker rooms	Package A.C.
	Average	60.40	Good metal panels and roof, finished interior, some trim	Drywall, plain courts, limited viewing, snack bar area, exercise facilities	Adequate lighting, plumbing, showers, add for pool or spa	Package A.C.
	Finished basement	58.90	Reinforced concrete, plaster or drywall interior	Exercise and dressing room finishes, some utility and storage	Adequate lighting and plumbing, showers and restrooms	Forced air
CDS	Good mezzanine	24.55	Not included	Open, finished running track, drywall soffit	Average lighting, no plumbing	In building cost
	Average mezzanine	16.60	Not included	Open, finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In building cost

MEZZANINES: Do not use story height or area/perimeter multipliers with mezzanine costs.

HANDBALL/RACQUETBALL CLUBS

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS : A small passer	nger or freight elevator with simple call system	SPRINKLER	RS: Apply to	o sprinklere	ed area.	
and push-button control, and	two or three stops, costs \$35,250 to \$55,500.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		5,000	\$2.45	\$3.10	\$3.90	\$4.95
	COST RANGE	10,000	2.20	2.75	3.45	4.35
LOCKERS: per opening,	single tier \$95 – \$195	15,000	2.10	2.60	3.25	4.00
	double 65 – 120	20,000	2.00	2.45	3.05	3.80
	triple 45 – 100	30,000	1.85	2.30	2.85	3.55
	box type	40,000	1.80	2.20	2.70	3.35
		60,000	1.70	2.05	2.55	3.10
SWIMMING POOLS: Swimmi	ng pools, complete, cost \$44.25 to \$127.75 per	80,000	1.60	1.95	2.40	2.95
square foot. For detailed cost	s, see Section UIP 16.	100,000	1.55	1.90	2.30	2.80

2 HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.	Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$4.60	Package A.C. (short ductwork) \$ 9.20	Central refrigeration (zoned)	\$7.30
Electric wall heaters	1.85	Warm and cool air (zoned) 13.90	package (short ductwork)	5.20
Forced air furnace	5.65	Hot/chilled water (zoned) 20.35	Central evaporative	3.15
Hot water	8.55	Heat pump system 11.05	Pkg. refrig \$1,375 to \$1,760 per ton	capacity
Space heaters, with fan	1.80		Evap. coolers . \$205 to \$345 per MCFN	/I capacity
radiant	2.20			
Steam (including boiler)	7.80			
without boiler	6.85	Small indiv. heat pumps cost \$1,225 to \$1,650	VENTILATION ONLY	
Wall or floor furnace	2.05	per ton of rated capacity.	Vent. (blowers/ducts)	\$1.60

3 HEIGHT REFINEMENTS

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

		,	,g
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
12	.89	20	1.11
14	.95	22	1.16
16	1.00 (base)	24	1.21
18	1.05		

Average Floor Area						A	VERAGI	PERIM	IETER						Average Floor Area.
Sq.Ft./Story	300	350	400	450	500	550	600	700	800	900	1000	1200	1400	1500	Sq. Ft./Story
5,000	1.07	1.10	1.13	1.16	1.18	1.21									5,000
10,000		1.00	1.01	1.03	1.04	1.06	1.07	1.10	1.13						10,000
15,000			.97	.98	.99	1.00	1.01	1.03	1.06	1.07					15,000
20,000					.97	.97	.98	1.00	1.01	1.03	1.04	1.07			20,000
25,000						.96	.96	.98	.99	1.00	1.01	1.04			25,000
30,000							.95	.96	.97	.98	.99	1.01	1.03		30,000
35,000							.94	.95	.96	.97	.98	1.00	1.01	1.03	35,000
40,000								.94	.95	.96	.97	.98	1.00	1.01	40,000
50,000								.93	.94	.94	.95	.96	.98	.99	50,000
60,000									.93	.94	.94	.95	.96	.97	60,000
70,000										.93	.93	.94	.95	.96	70,000
80,000											.93	.94	.94	.95	80,000

HANGARS - MAINTENANCE



AVERAGE CLASS S



LOW-COST CLASS S

OCCUPANCY DESCRIPTION: Hangars similar to storage hangars, but with more plumbing, electrical and interior construction costs. These hangars are used for complete maintenance and repair functions. The higher-quality hangars are the main base facilities for commercial airlines and include a large amount of interior construction. They include suitable office, locker, break and restroom areas, secure storage facilities, and electrical, plumbing, heating and utilities to accommodate large maintenance crews.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Office partitions and utility services.

NOT INCLUDED IN COSTS: Sprinklers, personnel lifts, hoists, security equipment or furnishings.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$112.10	Structural steel, concrete panels, major jet hangars	Supply rooms, offices, heavy floor, craneways	Many power outlets, good lighting and plumbing	Package A.C.
C	Good	75.05	Steel frame, concrete panels or brick, heavy structure	Supply rooms, offices, heavy floor, storage and repair	Good electrical and plumbing	Space heaters
	Average	54.05	Pilasters or steel frame, block, tilt-up, wood or steel trusses	Painted, few partitions, small office, concrete floor	Power outlets, drains, restroom	Space heaters
	Low cost	39.05	Concrete block, low-cost brick, tilt-up, light roof structure	Some partitions, few extras, concrete or asphalt floor	Minimum lighting and plumbing, power outlets	Space heaters
D	Average	50.90	Frame and stucco or siding, light & medium aircraft hangars	Small office, few partitions, concrete floor	Power outlets, drains, restroom	Space heaters
"	Low cost	36.50	Wood frame, stucco or siding, light roof structure	Some partitions, few extras, concrete or asphalt floor	Minimum electrical and plumbing, power outlets	Space heaters
	Excellent	103.00	Structural steel, heavy steel siding, major jet hangars	Supply rooms, offices, heavy floor, craneways	Many power outlets, good lighting and plumbing	Package A.C.
s	Good	66.40	Structural steel, steel siding, heavy aircraft hangars	Supply rooms, offices, heavy floor, storage and repair	Good electrical and plumbing	Space heaters
	Average	46.30	Steel frame and siding, light and medium aircraft hangars	Small office, few partitions, concrete floor	Power outlets, drains, restroom	Space heaters
	Low cost	32.55	Steel frame, steel siding, light roof structure	Some partitions, few extras, concrete or asphalt floor	Minimum electrical and plumbing, power outlets	Space heaters

HANGARS - MAINTENANCE

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

SPRINKLERS	: Apply to sp	rinklered a	rea.	
Sq. Ft.	LOW	AVG.	GOOD	EXCL.
5,000	\$2.05	\$2.65	\$3.50	\$4.55
10,000	1.85	2.35	3.10	4.00
15,000	1.75	2.25	2.85	3.70
20,000	1.65	2.15	2.75	3.50
30,000	1.55	2.00	2.55	3.25
50,000	1.45	1.85	2.35	2.95
80,000	1.35	1.70	2.15	2.70
100,000	1.30	1.65	2.05	2.60
150,000	1.25	1.55	1.95	2.40
200,000	1.20	1.45	1.85	2.30
300,000	1.10	1.40	1.70	2.10

HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.	Sq. Ft.	Sq. Ft	t.
HEATING ONLY	Costs	HEATING & COOLING Costs	COOLING ONLY Costs	s
Electric cable or baseboard	\$4.35	Package A.C. (short ductwork) \$ 9.45	Central refrigeration (zoned) \$8.20	o
Electric wall heaters	1.85	Warm and cool air (zoned) 12.50	package (short ductwork) 5.60	o
Forced air furnace	4.75	Hot/chilled water (zoned) 20.85	Central evaporative 3.75	5
Hot water	8.50	Heat pump system 11.15	Pkg. refrig \$1,180 to \$1,540 per ton capacit	ty
Space heaters, with fan	2.20		Evap. coolers . \$160 to \$270 per MCFM capacit	ty
radiant	2.65			
Steam (including boiler)	7.60	Small indiv. heat pumps cost \$1,125 to \$1,510	VENTILATION ONLY	
without boiler	6.45	per ton of rated capacity.	Vent. (blowers/ducts) \$1.45	5

HEIGHT REFINEME	NTS LTIPLIERS: Multiply base	cost by following multi	pliers for any variation in	average story height.	
	Square Foot Multiplier				Square Foot Multiplie
18	.80	30	1.00 (base)	60	1.62
20	.82	35	1.10	70	1.83
22	.86	40	1.20	80	2.07
24	.89	45	1.30	90	2.29
26	.93	50	1.40	100	2.50
28	.96	55	1.51	110	2.70

Average						AVER	AGE PE	RIMETE	ER						Average
Floor Area Sq.Ft./Story	300	350	400	450	500	550	600	800	1000	1200	1500	2000	2500	3000	Floor Area Sq. Ft./Story
5,000	1.09	1.12	1.15	1.19	1.22	1.26									5,000
10,000	.99	1.00	1.02	1.04	1.06	1.08	1.09	1.15							10,000
15,000			.97	.98	.99	1.01	1.02	1.07	1.11						15,000
20,000					.94	.95	.97	1.02	1.06	1.09					20,000
25,000						.92	.93	.98	1.02	1.05					25,000
50,000							.87	.89	.91	.93	.97	1.02			50,000
75,000								.86	.87	.89	.91	.95			75,000
100,000									.85	.87	.88	.91	.94		100,000
150,000										.84	.85	.87	.89	.91	150,000
200,000											.84	.85	.87	.88	200,000
250,000											.83	.84	.85	.87	250,000
300,000												.83	.84	.85	300,000

HANGARS - STORAGE



AVERAGE CLASS S



CHEAP CLASS D_{POLE}

OCCUPANCY DESCRIPTION: These buildings are designed primarily for aircraft storage and light maintenance and repair. Built usually in Class C, D or S construction, the highest-quality storage hangars are for line servicing of large commercial airplanes. Storage hangars have some office area and storage area.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Restroom and plumbing facilities for small crews of maintenance personnel.

NOT INCLUDED IN COSTS: Sprinklers, maintenance equipment or hoists.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
E	Excellent	\$68.05	Structural steel, concrete panels, major jet hangars	Offices, few partitions, heavy floor	Good lighting and plumbing	Space heaters
c	Good	47.45	Steel frame, concrete panels or brick, heavy structure	Offices, heavy floor	Good electrical and plumbing	Space heaters
	Average	31.60	Pilasters or steel frame, block, tilt-up, wood or steel trusses	Painted, small office, concrete floor	Adequate electrical and plumbing	None
Ī	Low cost	21.85	Block, cheap brick, tilt-up, light roof	Concrete or asphalt floor, few extras	Minimum electrical and water	None
D -	Average	29.20	Frame and stucco or siding, light & medium aircraft hangars	Small office, concrete floor	Adequate electrical and plumbing	None
ן ט	Low cost	20.05	Wood frame, stucco or siding, light roof structure	Concrete or asphalt floor, few extras	Minimum electrical and plumbing	None
D POLE L	Low cost	16.80	Metal siding on pole frame, windows, light aircraft hangar	Shop area, light floor, few extras, some interior wall finish	Adequate electrical and water service	None
	Cheap	12.30	Pole frame, metal siding	Unfinished, partially floored	Minimum electrical	None
E	Excellent	60.70	Structural steel, heavy steel siding, major jet hangars	Offices, few partitions, heavy floor	Good lighting and plumbing	Space heaters
	Good	41.45	Structural steel, steel siding, heavy aircraft hangars	Offices, heavy floor	Good electrical and plumbing	Space heaters
S	Average	26.80	Steel frame and siding, light and medium aircraft hangars	Small office, concrete floor	Adequate electrical and plumbing	None
Ī	Low cost	18.10	Pre-engineered, steel siding, light roof structure	Concrete or asphalt floor, few extras	Minimum electrical and water	None
	Cheap	13.20	Light metal frame, siding	Unfinished, partially floored	Minimum electrical	None

HANGARS - STORAGE

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

SPRINKLERS	: Apply to s	prinklered	area.	
Sq. Ft.	LOW	AVG.	GOOD	EXCL.
2,000	\$2.40	\$3.10	\$4.15	\$5.40
5,000	2.05	2.65	3.50	4.55
10,000	1.85	2.35	3.10	4.00
15,000	1.75	2.25	2.85	3.70
20,000	1.65	2.15	2.75	3.50
30,000	1.55	2.05	2.55	3.25
50,000	1.45	1.85	2.35	2.95
100,000	1.30	1.65	2.05	2.60

2 HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.	S	Sq. Ft.	,	Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$3.40	Package A.C. (short ductwork) \$	\$ 7.45	Central refrigeration (zoned)	\$6.45
Electric wall heaters	1.45	Warm and cool air (zoned)	9.85	package (short ductwork)	4.40
Forced air furnace	3.75	Hot/chilled water (zoned)	16.40	Central evaporative	2.95
Hot water	6.70	Heat pump system	8.75	Pkg. refrig \$1,180 to \$1,540 per to	n capacity
Space heaters, with fan	1.75			Evap. cooler . \$160 to \$270 per MCFN	1 capacity
radiant	2.05				
Steam (including boiler)	5.95	Small indiv. heat pumps cost \$1,125 to	\$1,510	VENTILATION ONLY	
without boiler	5.05	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.15

HEIGHT REFINEMENTS STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height. Average Wall Height Square Foot Multiplier Average Wall Height Square Foot Multiplier Average Wall Height Square Foot Multiplier .92 1.13 1.51 16 .95 26 1.17 45 1.64 1.22 50 18 1.00 (base) 28 1.77 30 20 1.04 1.27 55 1.91 22 1.08 35 2.05

Average Floor Area						AVER	AGE PE	RIMETE	R						Average Floor Area
Sq. Ft./Story	150	175	200	250	300	400	500	600	800	900	1000	1200	1500	2000	Sq. Ft./Story
2,000	1.13	1.17	1.22	1.31	1.40	1.59									2,000
5,000			1.01	1.05	1.08	1.14	1.22	1.30							5,000
10,000					.97	1.01	1.05	1.08	1.14						10,000
15,000						.96	.98	1.01	1.06	1.08					15,000
20,000							.94	.97	1.01	1.03	1.05	1.08			20,000
25,000							.93	.94	.97	1.00	1.01	1.04			25,000
30,000								.93	.96	.97	.98	1.01	1.05		30,000
40,000								.91	.93	.94	.95	.97	1.00		40,000
50,000								.89	.91	.92	.93	.94	.96	1.01	50,000
60,000									.90	.91	.91	.93	.95	.98	60,000
80,000										.88	.89	.90	.92	.95	80,000
100,000											.87	.88	.90	.93	100,000

HANGARS - T







LOW-COST CLASS S

OCCUPANCY DESCRIPTION: These are multiple hangars for small planes, with subdivided walls, and doors. Interiors have concrete slab floors, with very few extras. They have minimum electrical, occasionally plumbing and, commonly, no heating or cooling.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Sprinklers, heating or plumbing.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
С	Average	\$23.80	Concrete block, low-cost brick, tilt-up, light roof structure	Subdivided storage hangar, concrete floor, small office	Adequate electrical and water service	None
DPOLE	Low cost	15.35	Pole frame and truss, metal siding	Subdivided storage hangar, few extras, light floor and doors	Minimum electrical service	None
s	Average	21.05	Good steel frame, enameled steel panels	Subdivided storage hangar, concrete floor, small office	Adequate electrical and water service	None
	Low cost	16.30	Pre-engineered, steel siding	Subdivided storage hangar, few extras, light floor	Minimum electrical service	None

HANGARS - T

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

CANOPIES: Open sport-plane canopies or sunshade shelters generally SPRINKLERS: Apply to sprinklered area. cost \$5.75 to \$11.75 per square foot of covered area. Sq. Ft. LOW AVG. GOOD EXCL. 5,000 \$2.05 \$2.65 \$3.50 \$4.55 10,000 1.85 2.35 3.10 4.00 15,000 1.75 2.25 2.85 3.70 20.000 1.65 2.15 2 75 3 50 30,000 1.55 2 00 2 55 3 25 50,000 2.35 2.95 1.45 1.85 000,08 1.35 1.70 2.15 2.70 100,000 1.30 1.65 2.05 2.60

2 HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

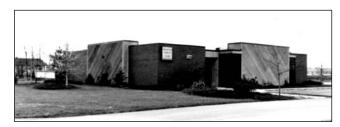
	Sq. Ft.	Sq	լ. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING Co	osts	COOLING ONLY	Costs
Electric cable or baseboard	\$2.90	Package A.C. (short ductwork) \$ (6.30	Central refrigeration (zoned)	\$5.50
Electric wall heaters	1.25	Warm and cool air (zoned)	8.35	package (short ductwork)	3.75
Forced air furnace	3.20	Hot/chilled water (zoned) 13	3.90	Central evaporative	2.50
Hot water	5.65	Heat pump system	7.40	Pkg. refrig \$1,180 to \$1,540 per ton	capacity
Space heaters, with fan	1.45			Evap. coolers . \$160 to \$270 per MCFN	/I capacity
radiant	1.75				
Steam (including boiler)	5.05	Small indiv. heat pumps cost \$1,125 to \$1	1,510	VENTILATION ONLY	
without boiler	4.30	per ton of rated capacity.		Vent. (blowers/ducts)	\$.95
					I

HEIGHT REFINEMENTS
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.97	14	1.09
10	1.00 (base)	16	1.13
12	1.04	18	1.18

AVERAGE PERIMETER Average Average Floor Area Floor Area Sq.Ft./Story 100 150 200 250 300 350 400 450 500 600 800 1000 1200 1500 Sq. Ft./Story 1.000 1.23 1 43 1.63 1.82 1.000 2.000 1.23 1.34 1.53 2.000 1.13 1.43 5,000 1.03 5.000 1.07 1.11 1.15 1.19 1.23 1.31 8,000 1.01 .98 8,000 1.03 1.06 1.08 1.23 1.13 10,000 99 1.03 10.000 97 1.01 1.07 1.15 15,000 94 95 99 15,000 .97 1.05 1.10 18,000 .95 .97 .94 1.01 1.05 18,000 20,000 20,000 .94 .95 .99 1.03 1.07 .92 25,000 .93 .96 .99 1.02 1.07 25,000 30,000 .92 94 .97 .99 1.03 30,000 40,000 .90 .92 .94 .95 .98 40,000 50,000 .88 .90 .92 .93 .95 50,000

HEALTH CLUBS



AVERAGE CLASS C



LOW-COST/AVERAGE CLASS C

OCCUPANCY DESCRIPTION: Health clubs are designed as physical fitness facilities, with varied exercise and conditioning areas. Generally, the better clubs have snack bars, massage and steam rooms and sauna facilities, as well as locker and shower rooms.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Suitable rooms for showers, lockers, and steam.

NOT INCLUDED IN COSTS: Elevators, sprinklers, kitchen equipment, steam-generating equipment, lockers, sports courts, spas, exercise equipment, swimming pools or spas.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Good	\$111.20	Stone trim, brick, metal or concrete panels and glass	Plaster, carpet, tile, hardwood, good snack bar, lounge and gym	Good lighting/lamps, steam, shower, locker and restrooms	Warm & cool air (zoned)
С	Average	81.35	Brick or block, concrete panels, some ornamentation	Plaster or drywall, carpet, vinyl composition, good exercise rooms	Adequate lighting, plumbing, sauna	Heat pump system
	Low cost	60.10	Concrete block or low cost brick, tilt-up, very plain	Painted block, drywall partitions, minimum facilitites	Minimum shower and locker rooms, minimum lighting	Package A.C.
	Good	107.35	Brick veneer, best stucco or siding, ornamentation	Plaster, carpet, tile, hardwood, good snack bar, lounge and gym	Good lighting/lamps, steam, shower, locker and restrooms	Warm & cool air (zoned)
D	Average	77.65	Good stucco or siding, some brick or stone trim	Plaster or drywall, some carpet and tile, good exercise rooms	Adequate lighting, plumbing, sauna	Heat pump system
	Low cost	56.75	Stucco or siding, very plain	Drywall, vinyl composition, few partitions, minimum facilities	Minimum shower and locker rooms, minimum lighting	Package A.C.
S	Average	73.10	Insulated metal sandwich panels, steel frame	Plaster or drywall, some carpet and tile, good exercise rooms	Adequate lighting, plumbing, sauna	Heat pump system
3	Low cost	53.10	Enameled metal siding, insulated, some interior finish	Drywall, vinyl composition, few partitions, minimum facilities	Minimum shower and locker rooms, minimum lighting	Package A.C.
CDS	Finished basement	51.10	Reinforced concrete, plaster or drywall interior	Utility and dressing room finishes	Adequate lighting and plumbing, showers and restrooms	Forced air
000	Utility basement	23.55	Painted interior, outside entry	Paint only, some partitions, golf cart maintenance and storage	Adequate lighting and outlets, drains	None

HEALTH CLUBS

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

SWIMMING POOLS: Swimming pools, complete, cost \$44.25 to \$127.75 SPRINKLERS: Apply to sprinklered area. EXCL. per square foot. For detailed costs, see Section UIP 16. Sq. Ft. LOW AVG. GOOD \$2.45 3,000 \$3.15 \$4.00 \$5.15 5.000 2.25 3.65 4.70 2.85 10,000 2.00 2.55 3.25 4.10 20,000 1.80 2.25 2.85 3.60 50,000 1.55 1.95 2.45 3.05

2 HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.	5	Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$3.55	Package A.C. (short ductwork) S	\$ 7.00	Central refrigeration (zoned)	\$5.70
Electric wall heaters	1.40	Warm and cool air (zoned)	9.75	package (short ductwork)	3.95
Forced air furnace	4.55	Hot/chilled water (zoned)	15.40	Central evaporative	2.70
Hot water, baseboard/convector	6.75	Heat pump system	7.95	Pkg. refrig \$1,200 to \$1,575 per tor	n capacity
radiant floor/ceiling	7.05	Ind. thru-wall heat pumps	3.50	Evap. coolers . \$155 to \$240 per MCFN	√ capacity
Steam (including boiler)	6.10				
without boiler	5.40	Small indiv. heat pumps cost \$1,075 to \$	\$1,475	VENTILATION ONLY	
Wall or floor furnace	1.55	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.10

3 HEIGHT REFINEMENTS

 $\textbf{MULTISTORY BUILDINGS:} \ \mathsf{Add.5\%} \ (1/2\%) \ \mathsf{for each story over three, above ground, to all base costs.}$

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.95	15	1.14
9	.97	16	1.18
10	1.00 (base)	17	1.21
11	1.03	18	1.24
12	1.06	19	1.27
13	1.08	20	1.31
14	1.11		

4	Average Floor Area						AVER	AGE PE	RIMETE	R						Average Floor Area
	Sq.Ft./Story	250	300	350	400	450	500	550	600	650	700	750	800	850	900	Sq. Ft./Story
	4,000	.99	1.02	1.06	1.09	1.12										4,000
	6,000	.93	.95	.98	1.00	1.02	1.05	1.07								6,000
	8,000		.92	.93	.95	.97	.99	1.01	1.02	1.04						8,000
	10,000			.91	.92	.94	.95	.97	.98	1.00	1.01	1.02				10,000
	12,000			.89	.90	.92	.93	.94	.95	.96	.98	.99	1.00			12,000
	14,000				.89	.90	.91	.92	.93	.94	.95	.96	.97	.98		14,000
	15,000				.88	.89	.90	.91	.92	.92	.93	.94	.95	.96	.97	15,000
	18,000					.88	.89	.90	.90	.91	.92	.93	.94	.94	.95	18,000
	20,000						.88	.89	.89	.90	.91	.92	.92	.93	.94	20,000
	24,000						.87	.87	.88	.89	.89	.90	.90	.91	.92	24,000
	26,000							.87	.87	.88	.88	.89	.90	.90	.91	26,000
	30,000								.86	.87	.87	.88	.88	.89	.89	30,000

HOMES FOR THE ELDERLY



GOOD CLASS B





AVERAGE CLASS B

OCCUPANCY DESCRIPTION: These structures include congregate housing for the elderly, typically consisting of one- or two-room suites with limited individual and common kitchen and dining areas, lounges, nursing and therapy rooms. The better qualities may also include alarm systems. They may be built of all classes. They may also include some special plumbing fixtures.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, kitchen equipment, balconies, therapy or recreational equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Good	\$126.90	Face brick, metal and glass, architectural concrete	Plaster or drywall, carpeting, vinyl composition, ceramic tile	*Good lighting, alarm system, some special plumb. fixtures	Hot & chilled water (zoned)
Α	Average	99.65	Brick, concrete or metal and glass, little ornamentation	Plaster or drywall, carpet, vinyl composition	*Adequate lighting/plumbing, some extras	Warm & cool air (zoned)
	Low cost	79.30	Concrete block or panels, little trim	Plaster or drywall, painted block, low cost carpet, vinyl composition	*Minimum lighting/plumbing	Hot water
	Good	122.90	Face brick, metal and glass, architectural concrete	Plaster or drywall, carpeting, vinyl composition, ceramic tile	*Good lighting, alarm system, some special plumb. fixtures	Hot & chilled water (zoned)
В	Average	96.10	Brick, concrete or metal and glass, some ornamentation	Plaster or drywall, some exposed block, carpeting, vinyl composition	*Adequate lighting/plumbing, some extras	Warm & cool air (zoned)
	Low cost	76.20	Concrete block or panels, little trim	Exposed block, acoustic tile, drywall, vinyl composition	*Minimum lighting/plumbing	Hot water
A-B	Finished basement	59.35	Finished interior	Plaster or drywall, vinyl comp., therapy and housekeeping rooms	Adequate lighting/plumbing, high-voltage outlets	Hot water
	Good	104.05	Face brick, metal or concrete and glass, good design	Plaster or drywall, vinyl comp., some carpeting and ceramic tile	*Good lighting, alarm system, some special plumb. fixtures	Warm & cool air (zoned)
С	Average	79.30	Brick or block, concrete panels, little ornamentation	Plaster or drywall, some exposed block, carpeting, vinyl composition	*Adequate lighting/plumbing, few extras	Hot water
	Low cost	60.45	Brick, block, concrete pan- els, very plain	Exposed block, drywall, vinyl composition	*Minimum lighting/plumbing	Forced air
	Good	101.90	Brick veneer, best stucco or siding, good trim	Plaster or drywall, vinyl comp., some carpeting and ceramic tile	*Good lighting, alarm system, some special plumb. fixtures	Warm & cool air (zoned)
D	Average	77.05	Brick veneer, good stucco or siding, some trim	Plaster or drywall, acoustic tile, vinyl composition	*Adequate lighting/plumbing, few extras	Hot water
	Low cost	58.25	Stucco or siding	Drywall, vinyl composition	*Minimum lighting/plumbing	Forced air
s	Good	97.10	Best sandwich panels, good fenestration & ornamentation	Drywall, good finish, good carpet and vinyl composition	*Good lighting, alarm system, some special plumb. fixtures	Warm & cool air (zoned)
	Average	72.65	Sandwich panels, little trim	Drywall, carpet, vinyl composition	*Adequate lighting/plumbing	Hot water
CDS	Finished basement	42.95	Finished interior	Plaster or drywall, asphalt tile, therapy and housekeeping rooms	Adequate lighting/plumbing, high-voltage outlets	Forced air

For basement apartments, use 80% of comparable above ground units. For semi-basement apartments, use 90%.

HOMES FOR THE ELDERLY

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS: Buildings whose base costs include elevators are marked SPRINKLERS: Apply to sprinklered area. with an asterisk (*). If the building under consideration has no elevators, Sq. Ft. LOW AVG. GOOD EXCL. deduct the following from the base costs so marked. For detailed costs, 3,000 \$2.45 \$3.15 \$4.00 \$5.15 see Section UIP 8. 5,000 2.25 2.85 3.65 4.70 Classes A/B Classes C/D/S 10,000 3.25 Sq. Ft. Sq. Ft. 2.00 2.55 4.10 Costs Costs 20,000 1.80 2.25 2.85 3.60 Good \$3.50 Good \$2.20 50,000 1.55 1.95 2.45 3.05 2.65 Average 1.70 Average 2.00 Low cost 1.30 Low cost ELEVATOR STOPS: For basement stops, add \$4,250 to \$6,450 per stop. BALCONIES: Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

2 HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$3.55	Package A.C. (short ductwork)	\$ 7.00	Central refrigeration (zoned)	\$5.70
Electric wall heaters	1.40	Warm and cool air (zoned)	9.75	package (short ductwork)	3.95
Forced air furnace	4.55	Hot/chilled water (zoned)	15.40	Central evaporative	2.70
Hot water, baseboard/convector	6.75	Heat pump system	7.95	Pkg. refrig \$1,200 to \$1,575 per ton	capacity
radiant floor/ceiling	7.05	Ind. thru-wall heat pumps	3.50	Evap. coolers . \$155 to \$240 per MCFN	I capacity
Steam (including boiler)	6.10				
without boiler	5.40	Small indiv. heat pumps cost \$1,075 to	\$1,475	VENTILATION ONLY	
Wall or floor furnace	1.55	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.10

HEIGHT REFINEMENTS MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs. STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height. Average Wall Height **Square Foot Multiplier Average Wall Height Square Foot Multiplier** 8 .95 11 1.03 9 .97 1.06 12 1.00 (base) 10

4 [Average Floor Area						AVER	AGE PE	RIMETE	R						Average Floor Area
	Sq.Ft./Story	150	200	250	300	350	400	450	500	550	600	650	700	750	800	Sq. Ft./Story
	2,000	1.02	1.08	1.15	1.21	1.27										2,000
	4,000		.96	.99	1.02	1.05	1.08	1.12								4,000
	6,000			.94	.96	.98	1.00	1.02	1.04	1.06	1.08					6,000
	8,000				.93	.94	.96	.97	.99	1.01	1.02	1.04				8,000
	10,000					.92	.93	.95	.96	.97	.98	1.00	1.01	1.02		10,000
	12,000					.91	.92	.93	.94	.95	.96	.97	.98	.99	1.00	12,000
	14,000						.90	.91	.92	.93	.94	.95	.96	.97	.98	14,000
	16,000						.90	.90	.91	.92	.93	.93	.94	.95	.96	16,000
	18,000							.90	.90	.91	.92	.92	.93	.94	.94	18,000
	20,000								.90	.90	.91	.91	.92	.93	.93	20,000
	25,000									.89	.89	.90	.90	.91	.91	25,000
	30,000									.88	.88	.89	.89	.90	.90	30,000

HOSPITALS - CONVALESCENT





GOOD CLASS C

GOOD CLASS D

OCCUPANCY DESCRIPTION: This occupancy includes rest homes, sanitariums, nursing homes and buildings of hospital-type construction which give nursing care. They are designed for bed care and/or hotel and nursing care for ambulatory patients. These facilities do not have equipment for surgical care and treatment. Exterior and interior finishes are very similar to hospitals in terms of the materials used. While most have some type of combined heating and cooling system, lower-quality units may have heating only.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit, treatment and therapy rooms, service and administration areas, nurses' stations and signaling systems commensurate with the building class and quality. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, balconies, furniture, and equipment such as therapy or kitchen equipment, etc., which are not permanently attached.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
Α	Good	\$167.70	Face brick, stone trim, good metal or concrete with good glazing	Plaster or drywall, vinyl and ceramic walls, carpet and vinyl floors	*Signal system, therapy facilities, good lighting and plumbing	Hot and chilled water (zoned)
	Average	137.70	Brick, concrete, metal and glass, little ornamentation	Hospital without surgical facilities, good lounge areas	*Signal system, therapy facilities, adequate lighting and plumbing	Hot and chilled water (zoned)
В	Good	162.10	Face brick, stone trim, good metal or concrete with good glazing	Plaster or drywall, vinyl and ceramic walls, carpet and vinyl floors	*Signal system, therapy facilities, good lighting and plumbing	Hot and chilled water (zoned)
	Average	133.90	Brick, concrete, metal and glass, little ornamentation	Hospital without surgical facilities, acoustic and vinyl tile	*Signal system, therapy facilities, adequate lighting and plumbing	Hot and chilled water (zoned)
A-B	Finished basement	85.50	Reinforced concrete, plaster interior	Hospital finish, administrative and technical facilities	Adequate lighting and plumbing for skilled nursing facilities	Warm and cool air (zoned)
	Excellent	159.25	Highly ornamental metal or concrete panels and glass	Plaster, vinyl and ceramic wall finishes, carpet and vinyl floors	Signal system, therapy facilities, good lighting and plumbing	Hot and chilled water (zoned)
	Good	121.75	Metal and glass, brick, stone trim, some ornamentation	Plaster or drywall, enamel or vinyl walls, vinyl floor, some carpet	Signal system, therapy facilities, good lighting and plumbing	Warm and cool air (zoned)
С	Average	92.60	Brick, block, some metal and glass, some ornamentation	Plaster or drywall, acoustic ceilings, vinyl composition	Signal system, therapy facilities, adequate lighting and plumbing	Package A.C.
	Low cost	71.80	Brick, block, tilt-up, little ornamentation, simple entrance	Painted walls, some plaster or drywall, acoustic and asphalt tile	Minimum lighting and plumbing, minimum hospital facilities	Forced air
	Excellent	148.80	Face brick, stone, metal and glass, highly ornamental	Plaster, vinyl and ceramic wall finishes, carpet and vinyl floors	Signal system, therapy facilities, good lighting and plumbing	Warm and cool air (zoned)
D	Good	118.45	Brick veneer, EIFS, metal and glass, good entrance and trim	Plaster or drywall, good ceilings and floor covering	Signal system, therapy facilities, good lighting and plumbing	Warm and cool air (zoned)
"	Average	89.90	Good stucco or wood siding with brick or stone trim	Plaster or drywall, acoustic ceilings, vinyl composition	Adequate lighting and plumbing, signal system, some extras	Package A.C.
	Low cost	69.55	Stucco or siding, little trim or ornamentation	Drywall, acoustic and asphalt tile, minimum detail	Adequate lighting and plumbing, minimum extra facilities	Forced air
DPOLE	Low cost	65.80	Pole frame, good metal panels, finished inside, little trim	Drywall, acoustic and asphalt tile, minimum detail	Adequate lighting and plumbing, minimum extra facilities	Forced air
s	Average	84.90	Sandwich panels with brick or stone trim	Drywall, acoustic ceilings, vinyl composition	Adequate lighting and plumbing, signal system, some extras	Package A.C.
	Low cost	65.75	Insulated metal panels, little or no ornamentation	Drywall, acoustic and asphalt tile, minimum detail	Adequate lighting and plumbing, minimum extra facilities	Forced air
CDS	Finished basement	56.65	Reinforced concrete, plaster or drywall interior	Hospital finish, administrative and technical facilities	Adequate lighting and plumbing for skilled nursing facilities	Forced air

HOSPITALS - CONVALESCENT

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS: Bu	ildings whose base costs include service elevators are	SPRINKLERS	: Apply to sp	rinklered a	rea.	
marked with an as	sterisk (*). If the building under consideration has no ele	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
vators, deduct the	following from the base costs so marked. For detailed	2,000	\$2.85	\$3.65	\$4.70	\$6.05
costs, see Section	ı UIP 8.	5,000	2.45	3.15	4.00	5.05
Classes A/B	Sq. Ft.	10,000	2.20	2.80	3.50	4.45
	Costs	15,000	2.05	2.60	3.25	4.10
Good	\$3.85	20,000	2.00	2.50	3.10	3.90
Average	2.70	30,000	1.85	2.30	2.90	3.60
		50,000	1.70	2.15	2.65	3.25
		75,000	1.60	2.00	2.45	3.05
ELEVATOR STO	PS: For basement or mezzanine elevator stops, add	100,000	1.55	1.90	2.35	2.90
\$4,300 to \$6,525	per stop.					
		BALCONIES:	Exterior balc	onies gene	rally cost 1	/3 to 1/2 of th
	r elevator with simple call system and push-button con- er cab, and two or three stops, costs \$35,250 to \$55,500.	final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.				

2 HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.	Š	Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$5.10	Package A.C. (short ductwork)	\$ 7.90	Central refrigeration (zoned)	\$6.80
Electric wall heaters	1.85	Warm and cool air (zoned)	13.15	package (short ductwork)	4.80
Forced air furnace	5.70	Hot/chilled water (zoned)	19.70	Central evaporative	2.95
Hot water	8.90	Heat pump system	10.50	Pkg. refrig \$1,380 to \$1,770 per tor	n capacity
Space heaters, with fan	1.85			Evap. coolers . \$205 to \$340 per MCFN	// capacity
radiant	2.20				
Steam (including boiler)	8.35				
without boiler	7.35	Small indiv. heat pumps cost \$1,190 to \$	\$1,650	VENTILATION ONLY	
Wall or floor furnace	2.00	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.55

3 HEIGHT REFINEMENTS

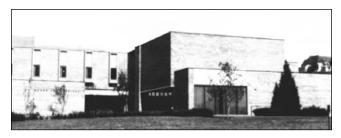
 $\textbf{MULTISTORY BUILDINGS:} \ \mathsf{Add.5\%} \ (1/2\%) \ \mathsf{for each story over three, above ground, to all base costs.}$

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.95	12	1.05
9	.98	13	1.07
10	1.00 (base)	14	1.11
11	1.03		

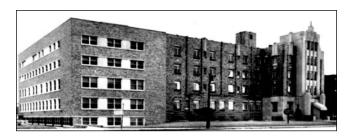
4	Average		AVERAGE PERIMETER										Average			
	Floor Area Sq.Ft./Story	175	200	250	300	350	400	500	550	600	700	800	1000	1200	1500	Floor Area Sq. Ft./Story
			200	230			400	300	330	600	700	000	1000	1200	1500	
	2,000	1.08	1.11	1.04	1.25	1.32										2,000
	5,000			.97	1.00	1.03	1.06	1.11	1.14							5,000
	10,000					.93	.94	.97	.99	1.00	1.03	1.06				10,000
	15,000						.90	.92	.93	.94	.96	.98	1.02			15,000
	20,000							.90	.91	.91	.93	.94	.97	1.00		20,000
	25,000								.89	.89	.91	.92	.94	.96		25,000
	30,000									.88	.89	.90	.92	.94	.97	30,000
	35,000										.88	.89	.91	.92	.95	35,000
	40,000										.88	.88	.90	.91	.93	40,000
	45,000										.87	.87	.88	.89	.91	45,000
	50,000											.86	.87	.88	.90	50,000
	60,000												.86	.87	.88	60,000

HOSPITALS – GENERAL



AVERAGE/GOOD CLASS A

OCCUPANCY DESCRIPTION: Designed as complete health care facilities, they typically include a number of different health services within one building or groups of buildings. Typical areas found include diagnostic, surgery, patient care, delivery, nursery, emergency, administration, service areas and pharmacies. The amount of actual area associated with all or some of these specific areas varies with the size of the building and the number of people serviced by the hospital. The types of facilities available in the hospital generally are commensurate with the overall quality of the general structure. Exterior finishes vary with decorative marble, granite, concrete and metal and glass panels in the better qualities and brick, block, masonry veneers with very little ornamentation at the lower quality. Plaster or drywall is found on the interiors, with suspended acoustic tile ceilings. Floor finishes are commonly ceramic, vinyl or some other type of resilient floor cover. Signal systems, special oxygen piping and pneumatic conveyors are



AVERAGE CLASS A

commonly found. They conform to the overall quality and design of the structure. Most hospitals have complete heating, ventilating and air conditioning systems.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit plus Group I equipment which is installed in or attached to the building and is usually a part of the general contract, such as built-in cabinets and nursing stations. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinkler systems or exterior balconies. Group II equipment which may be installed and becomes a part of the real property, but is typically not a part of the general contract such as autoclaves, permanent surgical lights and other equipment, and Group III equipment which is movable personal property such as furniture, fixtures, instruments, etc.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$332.55	Marble, granite, best metal and glass, highly decorative	Plaster, vinyl and tile wall surfaces, best ceilings and floors	*Oxygen, pneumatic conveyor, signal, much automation	Complete H.V.A.C.
A	Good	252.95	Brick, metal and glass, stone trim, some ornamentation	Plaster or drywall, best enamels or vinyl walls, ceramic, vinyl, rubber tile	*Signal system, oxygen piping, pneumatic conveyors	Complete H.V.A.C.
^	Average	192.90	Metal and glass, concrete, brick panels, little ornamentation	Drywall, acoustic ceilings, vinyl and ceramic floors, linoleum	*Signal system, oxygen piping, adequate lighting and plumbing	Complete H.V.A.C.
	Low cost	147.35	Concrete panels, brick, very plain, small entrance	Drywall, acoustic ceilings, vinyl composition, minimum detail	*Signal system, adequate lighting and plumbing	Complete H.V.A.C.
	Excellent	323.35	Marble, granite, face brick, highly decorative	Plaster, vinyl and tile wall surfaces, best ceilings and floors	*Oxygen, pneumatic conveyor, signal, much automation	Complete H.V.A.C.
В	Good	246.45	Brick, metal and glass, stone trim, some ornamentation	Plaster or drywall, best enamels or vinyl walls, ceramic, vinyl floors	*Signal system, oxygen piping, pneumatic conveyors	Complete H.V.A.C.
	Average	188.35	Metal and glass, concrete, brick, little ornamentation	Drywall, acoustic ceilings, vinyl and ceramic floors, linoleum	*Signal system, oxygen piping, adequate lighting and plumbing	Complete H.V.A.C.
	Low cost	144.20	Concrete panels, brick, very plain, small entrance	Drywall, acoustic ceilings, vinyl composition, minimum detail	*Signal system, adequate lighting and plumbing	Complete H.V.A.C.
А-В	Finished basement	109.05	Reinforced concrete, plaster interior	Hospital finish, administrative and technical facilities and services	Adequate lighting and plumbing for hospital facilities	Complete H.V.A.C.
Α-Β	Parking basement	41.15	Unfinished interior	Unfinished, small service area	Minimum lighting/plumbing	Ventilation
	Excellent	263.65	Stone ashlar, best metal or concrete and glass panels	Plaster, vinyl and tile wall surfaces, best ceilings and floors	*Oxygen, pneumatic conveyor, signal, much automation	Complete H.V.A.C.
c	Good	195.80	Brick, metal and glass, stone, good ornamentation	Plaster or drywall, best enamels or vinyl walls, ceramic, vinyl floors	*Signal system, oxygen piping, good lighting and plumbing	Complete H.V.A.C.
	Average	145.95	Metal and glass, brick, block, concrete, little ornamentation	Plaster or drywall, acoustic ceilings, vinyl or tile floors, some ceramic	*Signal system, oxygen piping, adequate lighting and plumbing	Complete H.V.A.C.
	Low cost	107.80	Brick, block, tilt-up, small entrance, very plain	Plaster or drywall, acoustic tile, vinyl composition, minimum detail	Adequate lighting and plumbing, signal system, few extras	Complete H.V.A.C.
	Good	187.80	Brick veneer, EIFS, good entrance and ornamentation	Plaster or drywall, enamel or vinyl, ceramic tile and vinyl floors	Signal system, oxygen piping, good lighting and plumbing	Complete H.V.A.C.
D	Average	140.65	Brick veneer, good stucco or siding with brick or stone trim	Plaster or drywall, acoustic ceilings, vinyl or tile floors, some ceramic	Adequate lighting and plumbing, signal system, some extras	Complete H.V.A.C.
	Low cost	105.55	Stucco or siding, little trim or ornamentation	Drywall or plaster, acoustic tile, vinyl composition, minimum extras	Adequate lighting and plumbing, minimum signal system	Complete H.V.A.C.
S	Low cost	99.80	Insulated panels	Metal or drywall, acoustic tile ceilings, vinyl composition	Minimum general hospital facilities	Complete H.V.A.C.
CDS [†]	Finished basement	79.80	drywall interior	Hospital finish, administrative and technical facilities and services	Adequate lighting and plumbing for hospital facilities	Complete H.V.A.C.
	Park. bsmt.	28.25	Unfinished interior	Finished ceiling, concrete floor	Minimum lighting, drains	Ventilation

For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$4.35 per square foot.

GOOD EXCL.

\$5.05

4.45

4.10

3.90

3.60

3.25

3.05

2.90

\$4.00

3.50

3.25

3.10

2.90

2.65

2.45

2.35

HOSPITALS – GENERAL

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

1 ELEVATORS: Buildings whose base costs include service elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs, see Section UIP 8.

costs, see Section	UIP 8.			10,000	
Classes A/B	Sq. Ft.	Class C	Sq. Ft.	15,000	
	Costs		Costs	20,000	
Excellent	\$8.55	Excellent	\$4.35	30,000	
Good	5.85	Good	2.75	50,000	
Average	4.00	Average	1.75	75,000	
Low cost	2.70			100,000	

ELEVATOR STOPS: For basement or mezzanine elevator stops, add \$4,300 to \$6,525 per stop.

A small passenger elevator with simple call system and push-button control, four-passenger cab, and two or three stops, costs \$35,250 to \$55,500.

BALCONIES: Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

AVG.

\$3.15

2.80

2.60

2.50

2.30

2.15

2.00

1.90

SPRINKLERS: Apply to sprinklered area.

LOW

\$2.45

2.20

2.05

2.00

1.85

1.70

1.60

1.55

Sq. Ft.

5,000

2 HEATING AND COOLING

The basement costs include low-cost complete H.V.A.C. These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.		Sq. Ft.
COMPLETE H.V.A.C	Costs	COMPLETE H.V.A.C	Costs
Classes A/B		Classes C/D/S	
Excellent	\$38.50	Excellent	\$34.10
Good	30.30	Good	26.80
Average	23.85	Average	21.10
Low cost	18.75	Low cost	16.60

3 HEIGHT REFINEMENTS

MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
10	.95	14	1.05
11	.98	15	1.07
12	1.00 (base)	16	1.09
13	1.02		

4	Average Floor Area						Α	VERAGI	E PERIM	IETER						Average Floor Area
	Sq.Ft./Story	300	350	400	450	500	550	600	700	800	900	1000	1200	1500	2000	Sq. Ft./Story
	5,000	1.00	1.02	1.04	1.07	1.09	1.11									5,000
	10,000		.95	.96	.97	.98	.99	1.00	1.02	1.04						10,000
	15,000				.93	.94	.95	.96	.97	.99	1.00					15,000
	20,000					.92	.93	.93	.95	.96	.97	.98	1.00			20,000
	25,000						.92	.92	.93	.94	.95	.96	.97			25,000
	30,000							.91	.92	.93	.93	.94	.96	.98		30,000
	40,000								.91	.91	.92	.92	.93	.95		40,000
	50,000								.90	.90	.91	.91	.92	.93	.96	50,000
	60,000									.90	.90	.91	.91	.92	.94	60,000
	70,000										.90	.90	.91	.92	.93	70,000
	80,000											.89	.90	.91	.92	80,000
	100,000											.88	.89	.90	.91	100,000

HOSPITALS - SURGICAL CENTERS



AVERAGE CLASS C

AVERAGE CLASS C

OCCUPANCY DESCRIPTION: These structures are freestanding ambulatory outpatient or same-day surgery facilities. They include clinical surgery, diagnostic, lab, administrative and public areas commensurate with the quality level. Operating rooms normally take up 2.5% of the area. Cost includes fixed equipment only. Specialized radiation and imaging treatment and diagnostic centers are represented by this occupancy.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit

NOT INCLUDED IN COSTS: Sprinklers, kitchen equipment, balconies, therapy or recreational equipment.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Good	\$256.50	Brick, metal and glass, stone trim, some ornamentation	Plaster or drywall, best enamels or vinyl walls, ceramic, vinyl, rubber tile	Good lighting and plumbing, best surgical, good imaging center	Complete H.V.A.C.
A-B	Average	188.30	Brick, concrete panels, metal and glass, little ornamentation	Drywall, vinyl & tile wall surfaces, good ceilings and floors, some shielding	Adequate lighting and plumbing for surgical facilities, some extras	Complete H.V.A.C.
A-B	Finished basement	129.55	Heavy reinforced concrete, plaster interior	Outpatient finish, heavy shielding, imaging and radiation, some offices	Adequate lighting and plumbing for diagnostic facilities	Complete H.V.A.C.
	Excellent	303.45	Stone ashlar, best metal or concrete and glass panels	Plaster, vinyl and tile wall surfaces, best ceilings and floors	Best diagnostic and research, best radiation therapy	Complete H.V.A.C.
	Good	210.80	Brick, metal and glass, stone, good concrete, good entrance	Plaster or drywall, best enamels or vinyl walls, ceramic, vinyl, shielding	Good lighting and plumbing, small lab, some extras, good imaging	Complete H.V.A.C.
С	Average	146.90	Metal and glass, brick, block, concrete, little ornamentation	Plaster or drywall, acoustic ceilings, vinyl or tile floors, some carpet	Adequate lighting and plumbing for surgical facilities	Complete H.V.A.C.
	Fair	122.75	Brick, ornamental block, some metal and glass and trim	Plaster or drywall, acoustic ceilings, vinyl composition, some carpet	Adequate therapeutic, wellness facility, good dialysis	Complete H.V.A.C.
	Low cost	102.65	Brick, block, tilt-up, small entrance, very plain	Plaster or drywall, acoustic tile, vinyl composition, minimum detail	Minimum treatment facilities, dialysis, some diagnostic	Complete H.V.A.C.
	Excellent	292.60	Ashlar stone veneer, best metal and glass panels	Plaster, vinyl and tile wall surfaces, best ceilings and floors	Best diagnostic and research, best radiation therapy	Complete H.V.A.C.
	Good	204.30	Face brick or stone veneer, good entrance and trim	Plaster or drywall, best enamels or vinyl walls, ceramic, vinyl, shielding	Good lighting and plumbing, small lab, some extras, good imaging	Complete H.V.A.C.
D	Average	143.20	Brick veneer, EIFS, ornamental stucco, metal and glass	Plaster or drywall, acoustic ceilings, vinyl or tile floors, some carpet	Adequate lighting and plumbing for surgical facilities	Complete H.V.A.C.
	Fair	119.95	Siding, brick veneer, some metal and glass and trim	Plaster or drywall, acoustic ceilings, vinyl composition, some carpet	Adequate therapeutic, wellness facility, good dialysis	Complete H.V.A.C.
	Low cost	100.50	Stucco or siding, little trim or ornamentation	Drywall or plaster, acoustic tile, vinyl composition, minimum extras	Adequate lighting and plumbing, minimum diagnostic facilities	Complete H.V.A.C.
	Average	135.85	Insulated panels, some trim	Plaster or drywall, acoustic ceilings, vinyl or tile floors, some carpet	Adequate lighting and plumbing for surgical or cancer facilities	Complete H.V.A.C.
s	Fair	113.95	Insulated panels, some trim	Plaster or drywall, acoustic ceilings, vinyl composition, some carpet	Adequate therapeutic, wellness facility, good dialysis	Complete H.V.A.C.
	Low cost	95.65	Insulated panels	Metal or drywall, acoustic tile ceilings, vinyl comp., minimum extras	Minimum treatment facilities, dialysis, some diagnostic	Complete H.V.A.C.
CDS	Finished basement	105.95	Heavy reinforced concrete, plaster or drywall interior	Outpatient finish, heavy shielding, imaging and radiation, some offices	Adequate lighting and plumbing for diagnostic facilities	Complete H.V.A.C.

HOSPITALS – SURGICAL CENTERS

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

SPRINKLERS: Apply to sprinklered area. **ELEVATORS:** A small passenger elevator with simple call system and EXCL. push-button control, four-passenger cab, and two or three stops, costs Sq. Ft. LOW AVG. GOOD 2,000 \$35,250 to \$55,500 \$2.85 \$3.65 \$4.70 \$6.05 5,000 2.45 3.15 4.00 5.05 10,000 2.20 2.80 3.50 4.45 15,000 2.05 2.60 3.25 4.10 20,000 2.00 3.10 2.50 3.90 30,000 1.85 2.30 2.90 3.60 50,000 1.70 2.15 2.65 3.25 75,000 1.60 2.00 2.45 3.05 100,000 1.55 1.90 2.35 2.90 CANOPIES: Large entrance carport canopies generally cost 1/4 to 2/5 BALCONIES: Exterior balconies generally cost 1/3 to 1/2 of of the final cost per square foot of the building. the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

2 HEATING AND COOLING

The basement costs include low-cost complete H.V.A.C. These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.		Sq. Ft.
COMPLETE H.V.A.C	Costs	COMPLETE H.V.A.C	Costs
Classes A/B		Classes C/D/S	
Excellent	\$38.50	Excellent	\$34.10
Good	30.30	Good	26.80
Average	23.85	Average	21.10
Low cost	18.75	Low cost	16.60

3 HEIGHT REFINEMENTS

MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
10	.95	14	1.05
11	.98	15	1.07
12	1.00 (base)	16	1.09
13	1.02		

4	Average Floor Area						Α	VERAG	E PERI	METER						Average Floor Area
	Sq.Ft./Story	175	200	250	300	350	400	500	550	600	700	800	1000	1200	1500	Sq. Ft./Story
	2,000	1.08	1.11	1.18	1.25	1.32										2,000
	5,000			.97	1.00	1.03	1.06	1.11	1.14							5,000
	10,000					.93	.94	.97	.99	1.00	1.03	1.06				10,000
	15,000						.90	.92	.93	.94	.96	.98	1.02			15,000
	20,000							.90	.91	.91	.93	.94	.97	1.00		20,000
	25,000								.89	.89	.91	.92	.94	.96		25,000
	30,000									.88	.89	.90	.92	.94	.97	30,000
	35,000									.87	.88	.89	.91	.92	.95	35,000
	40,000										.88	.88	.90	.91	.93	40,000
	50,000										.87	.87	.88	.89	.91	50,000
	60,000											.86	.87	.88	.90	60,000
	80,000												.86	.87	.88	80,000

HOSPITALS - VETERINARY



LOW-COST/AVERAGE CLASS S



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: These structures are designed for the medical and surgical care and treatment of small animals. Floor finish is generally resilient covering. Wall finishes, either plaster or drywall, are plain. Good-quality facilities also have some lab and X-ray areas. Individual cubicles or rooms within the structure include adequate lighting and plumbing.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit, X-ray rooms. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, X-ray equipment, cages, runs or open shelters.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$134.65	Brick, precast panels, some trim	Plaster or drywall, vinyl, laboratory and X-ray facilities	*Good lighting and plumbing, power outlets	Hot and chilled water (zoned)
	Excellent	154.70	Face brick, block or concrete, good entrance and trim	Plaster, ceramic, vinyl and carpet finishes, indoor exercise facilities	Good lighting and plumbing, lab, diagnostic and treatment facilities	Warm and cool air (zoned)
c	Good	119.10	Face brick, ornamental block, good trim and fenestration	Plaster or drywall, vinyl, good lab and X-ray facilities	Good lighting and plumbing, power outlets	Package A.C.
	Average	93.10	Brick, partially finished interior, some trim	Plaster or drywall, vinyl composition, cages and runs not included	Adequate lighting, fluoroscope outlets, adequate plumbing	Forced air
	Low cost	70.50	Block or tilt-up, very plain	Drywall, some asphalt tile floor	Minimum lighting and plumbing	Space heaters
	Excellent	150.55	Face brick or stone veneer, best siding, good entrance and trim	Plaster, ceramic, vinyl and carpet finishes, indoor exercise facilities	Good lighting and plumbing, lab, diagnostic and treatment facilities	Warm and cool air (zoned)
_D	Good	115.65	Good brick veneer, trim and fenestration	Plaster or drywall, vinyl, good laboratory and X-ray facilities	Good lighting and plumbing, power outlets	Package A.C.
	Average	90.30	Stucco or siding, brick trim or low cost brick veneer	Plaster or drywall, vinyl composition, cages and runs not included	Adequate lighting, fluoroscope outlets, adequate plumbing	Forced air
	Low cost	68.20	Stucco or siding, finished interior	Drywall, some asphalt tile floor	Minimum lighting and plumbing	Space heaters
DPOLE	Low cost	60.25	Pole frame, metal single wall, very plain	Drywall, some asphalt tile floor, cages and runs not included	Minimum lighting and plumbing	Space heaters
s	Average	82.10	Insulated sandwich panels or metal with finished interior	Drywall, vinyl composition, cages and runs not included	Adequate lighting, fluoroscope outlets, adequate plumbing	Forced air
	Low cost	60.40	Metal on light frame, very plain	Drywall, some asphalt tile floor	Minimum lighting and plumbing	Space heaters
CDS	Utility basement	23.35	Painted interior	Paint only, few partitions	Minimum lighting, drains	None

HOSPITALS – VETERINARY

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS : Buildir	ngs whose base costs include service elevators are	SPRINKLER	RS: Apply to	sprinklere	ed area.	
marked with an asteri	sk (*). If the building under consideration has no ele-	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
vators, deduct the fol	lowing from the base costs so marked. For detailed	1,000	\$2.95	\$3.75	\$4.95	\$6.35
costs, see Section U	P 8.	2,000	2.85	3.65	4.70	6.05
		5,000	2.45	3.15	4.00	5.05
Classes A/B	Sq. Ft.	10,000	2.20	2.80	3.50	4.45
	Costs	15,000	2.05	2.60	3.25	4.10
Average	\$2.75	20,000	2.00	2.50	3.10	3.90
		30,000	1.85	2.30	2.90	3.60

2 HEATING AND COOLING

These costs are averages of total installed costs of the entire heating or cooling installation, including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.		Sq. Ft.	, , , , ,	Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$5.35	Package A.C. (short ductwork)	\$ 8.30	Central refrigeration (zoned)	\$7.15
Electric wall heaters	1.95	Warm and cool air (zoned)	13.80	package (short ductwork)	5.05
Forced air furnace	6.00	Hot/chilled water (zoned)	20.65	Central evaporative	3.10
Hot water	9.35	Heat pump system	11.00	Pkg. refrig \$1,380 to \$1,770 per ton	capacity
Space heaters, with fan	1.95			Evap. coolers . \$205 to \$340 per MCFN	of capacity
radiant	2.30				
Steam (including boiler)	8.75				
without boiler	7.70	Small indiv. heat pumps cost \$1,190 to	\$1,650	VENTILATION ONLY	
Wall or floor furnace	2.10	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.65

	ultiply base cost by following multip	ilers for any variation in average :	story neight.
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.90	14	1.05
9	.93	15	1.07
10	.95	16	1.09
11	.98	18	1.14
12	1.00 (base)	20	1.18
13	1.02		

Average Floor Area						AVER	AGE PE	RIMETE	R						Average Floor Area
Sq.Ft./Story	125	150	200	250	300	350	400	450	500	600	700	800	1000	1200	Sq. Ft./Story
1,000	1.19	1.26	1.40	1.55											1,000
2,000		1.05	1.12	1.19	1.26	1.33									2,000
5,000				.97	1.00	1.03	1.06	1.09	1.12	1.17					5,000
6,000				.94	.97	.99	1.02	1.05	1.07	1.12					6,000
8,000					.93	.95	.97	.99	1.01	1.05	1.08				8,000
10,000						.92	.94	.95	.97	1.00	1.03	1.06			10,000
12,000						.90	.92	.93	.94	.97	.99	1.02			12,000
15,000							.89	.91	.92	.94	.96	.98	1.02		15,000
18,000								.89	.91	.92	.93	.95	.99		18,000
20,000									.89	.91	.92	.94	.97	1.00	20,000
25,000									.87	.89	.90	.91	.94	.96	25,000
30,000										.87	.88	.89	.92	.94	30,000

HOTELS - FULL SERVICE



AVERAGE/GOOD CLASS B

OCCUPANCY DESCRIPTION: Structure is three or more stories in height, having multiple sleeping units without individual kitchen facilities. Where the ground floor is entirely divided into stores and shops, that floor should be priced from Stores and Commercial Buildings. The quality of the hotel is determined primarily from the interior refinements. The best-quality hotels have a large amount of high-cost wall cover and floor finish in the open and public areas. Sleeping rooms also contain high-cost wall cover as part of the interior finish. The size of the support facilities, i.e., restaurants, etc., is largely dependent on the size and capacity of the facility rather than the quality of the improvements.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Allowances for lobby, lounges, restaurants, ballrooms, meeting rooms, kitchens, storage facilities and office areas commensurate with the building class and quality chosen. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, balconies, swimming pools. All furniture, fixtures and equipment, such as bars, counters or seating, kitchen equipment, etc. which are not permanently attached and included in the general building contract.

CLASS	TYPE	COST/ SQ.FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$160.95	Best metal or stone, heat- absorbent or double glazing	Fine detail and carpet, good plaster and wall coverings	*Best lighting, radio and TV circuits, top-quality plumbing	Hot and chilled water (zoned)
A	Good	132.45	Face brick, metal or concrete panels, individual design	Good detail, carpeted, highly decorated public rooms	*Good lighting, radio and TV circuits, good plumbing fixtures	Hot and chilled water (zoned)
^	Average	104.20	Face brick, metal or concrete panels, plain exterior	Typical good transient or average business hotel, adequate public rooms	*Lighting/plumbing above code, standard fixtures	Warm and cool air (zoned)
	Low cost	83.15	Brick, concrete block, metal stud panels, little ornamentation	Small lobby, coffee shop, minimum transient facilities	*Minimum lighting/plumbing, few extras	Hot water
	Excellent	156.00	Best metal or stone, heat- absorbent or double glazing	Fine detail, carpeted, highly decorated public rooms	*Best lighting, radio and TV circuits, good plumbing fixtures	Hot and chilled water (zoned)
	Good	128.25	Face brick, metal or concrete panels, individual design	Good detail, carpeted, highly decorated public rooms	*Good lighting, radio and TV circuits, good plumbing fixtures	Hot and chilled water (zoned)
В	Average	stucco panels, plain exterior business hotel, adequate public rooms		Typical good transient or average business hotel, adequate public rooms	*Lighting/plumbing above code, standard fixtures	Warm and cool air (zoned)
	Low cost		Brick, concrete block, synthetic plaster, little ornamentation	Small lobby, coffee shop, minimum transient facilities	*Minimum lighting/plumbing, few extras	Hot water
	Finished basement	62.35	Plaster or drywall interior	Plaster or drywall, vinyl composition, acoustic ceiling, shops, service funct.	Adequate lighting/plumbing, restrooms, utility rooms	Hot water
A-B	Parking basement	36.55	Unfinished	No partitions or floor covering	Minimum lighting/plumbing	Ventilation
	Util. bsmt.	33.70	Painted interior	Few partitions and fire walls	Utility lighting/plumbing	None
	Mezzanine 5		Not included	Typical hotel finish and detail	Adequate lighting/plumbing	In bldg. cost
	Excellent	129.80	Best metal or concrete panels, stone, face brick	Fine detail and carpet, good plaster and wall coverings	*Excellent lighting, radio and TV circuits, quality plumbing	Hot and chilled water (zoned)
С	Good	105.85	Brick, metal or concrete and glass, good trim and entrance	Plaster or drywall, carpeted, public rooms, good decorating and detail	*Good lighting/plumbing, radio and TV circuits	Warm and cool air (zoned)
	Average	88.85	Brick, stucco on block, some front ornamentation	Carpeted, plaster or drywall and painted masonry, adequate facilities	*All rooms with bath, adequate electric service	Heat pump system
	Low cost	71.85	Brick or concrete block	Few public rooms, small coffee shop	Minimum lighting/plumbing	Individual heat pumps
	Excellent	125.05	Best masonry veneer, metal and glass panels, highly decorative	Fine detail and carpet, good plaster and wall coverings	*Excellent lighting, radio and TV circuits, quality plumbing	Hot and chilled water (zoned)
D	Good	101.35	Brick veneer, metal and glass, good entrance and trim	Good finishes, carpeted rooms, good public rooms, lobby and detailing	*Excellent lighting/plumbing, radio and TV circuits	Warm and cool air (zoned)
	Average	84.65	Stucco or siding, brick trim, some front ornamentation	Plaster or drywall, carpeting, adequate ancillary facilities, dining and bar	*All rooms with bath, adequate electric service	Heat pump system
	Low cost	67.95	Stucco or siding	Few public rooms, small coffee shop	Minimum lighting/plumbing	Individual heat pumps
	Finished basement	46.00	Plaster or drywall interior	Plaster or drywall, vinyl composition, finished ceiling, service functions	Adequate lighting/plumbing, utility outlets and fixtures	Forced air
C-D [†]	Parking basement	39.10	Unfinished	Plaster ceiling, concrete floor	Minimum lighting/plumbing	Ventilation
	Utility basement	24.40	Unfinished	Unfinished, no ceiling	Minimum lighting/plumbing	None
	Mezzanine	22.40	Not included	Typical hotel finish and detail	Adequate lighting/plumbing	In bldg. cost

[†]For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$4.35 per square foot. **MEZZANINES:** Do not use story height or area/perimeter multipliers with mezzanine costs.

EXCL.

HOTELS - FULL SERVICE

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS: Buildings whose base costs included elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs see

deduct the following from	the base	costs so marked. For deta	iled costs see	5,000	\$2.25	\$2.85	\$3.65	\$4.70
Section UIP 8.				10,000	2.00	2.55	3.25	4.10
Classes A/B	Sq. Ft.	Classes C/D	Sq. Ft.	20,000	1.80	2.25	2.85	3.60
	Costs		Costs	50,000	1.55	1.95	2.45	3.05
Excellent	\$5.90	Excellent	\$3.60	100,000	1.40	1.75	2.15	2.65
Good	4.35	Good	2.75	200,000	1.25	1.55	1.90	2.35
Average	3.20	Average	2.10	500,000	1.10	1.35	1.60	1.95
Low cost	2.40	Low cost	1.60					

ELEVATOR STOPS: For basement stops, add \$4,250 to \$6,450 per stop.

CANOPIES: Large entrance carport canopies generally cost 1/4 to 2/5 of the final cost per square foot of the building.

BALCONIES: Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

AVG.

GOOD

For pool enclosures, see Page CAL 144

SPRINKLERS: Apply to sprinklered area.

LOW

Sq. Ft.

HEATING AND COOLING

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

HEATING ONLY	Sq. Ft. Costs	•	ı. Ft. osts	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard	\$3.55	Package A.C. (short ductwork) \$ 7	7.00	Central refrigeration (zoned)	\$5.70
Electric wall heaters	1.40	Warm and cool air (zoned) 9	9.75	package (short ductwork)	3.95
Forced air furnace	4.55	Hot/chilled water (zoned) 15	5.40	Central evaporative	2.70
Hot water, baseboard/convector	6.75	Heat pump system 7	7.95	Pkg. refrig \$1,200 to \$1,575 per tor	capacity
radiant floor/ceiling	7.05	Ind. thru-wall heat pumps 3	3.50	Evap. coolers \$155 to \$240 per MCFN	/I capacity
Steam (including boiler)	6.10				
without boiler	5.40	Small indiv. heat pumps cost \$1,075 to \$1,4	475	VENTILATION ONLY	
Wall or floor furnace	1.55	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.10

HEIGHT REFINEMENTS

MULTISTORY BUILDINGS: Up to 30 stories, add .5% (1/2%) for each story over three, above ground, to all base costs; over 30, add .4% (4/10%) for each additional story.

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.95	12	1.06
9	.97	13	1.08
10	1.00 (base)	14	1.11
11	1.03		

Average Floor Area						AVE	RAGE I	PERIME	TER						Average Floor Area
Sq. Ft./Story	250	300	350	400	450	500	550	600	700	800	900	1000	1100	1200	Sq. Ft./Story
4,000	.99	1.02	1.05	1.08	1.11										4,000
6,000	.94	.96	.98	1.00	1.02	1.04	1.06								6,000
8,000		.93	.94	.96	.97	.99	1.01	1.02	1.05						8,000
10,000			.92	.94	.95	.96	.97	.98	1.01	1.03					10,000
12,000			.91	.92	.93	.94	.95	.96	.98	1.00	1.02				12,000
16,000				.90	.91	.91	.92	.93	.94	.96	.97				16,000
20,000						.90	.90	.91	.92	.94	.95	.96	.97		20,000
24,000						.89	.89	.90	.91	.92	.93	.94	.95	.96	24,000
28,000							.89	.89	.90	.91	.92	.92	.93	.94	28,000
32,000								.88	.89	.90	.91	.91	.92	.93	32,000
36,000								.88	.89	.89	.90	.91	.91	.92	36,000
40,000									.88	.89	.89	.90	.90	.91	40,000

HOTELS – LIMITED SERVICE



AVERAGE/GOOD CLASS C

OCCUPANCY DESCRIPTION: These structures are three or more stories high, having multiple sleeping units and limited common area amenities. Studio and bedroom suites can have limited kitchen facilities for extended stays. The quality of the hotel is determined primarily from the interior refinements. The best quality hotels have some high-cost wall cover and floor finish in the open and public areas, with larger sleeping room suites containing high cost wall cover. Limited service hotels include some lounge or recreation support facilities, lobby, laundry, storage and office space commensurate with the size and quality of the facility.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Allowances for lobby, lounges, restaurants, ballrooms, meeting rooms, kitchens, storage facilities and office areas commensurate with the building class and quality chosen. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, balconies, swimming pools. All furniture, fixtures and equipment, such as bars, counters or seating, kitchen equipment, etc. which are not permanently attached and included in the general building contract.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ.FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT	
	Excellent	\$115.10	Metal or stone, heat-absorbent or double glazing	Fine detail and carpet, good plaster and wall coverings, some custom suites	*Best lighting, TV circuits, wet bar, top-quality plumbing	Hot and chilled water (zoned)	
A	Good	97.05	Face brick, metal or good concrete or stucco panels,	Typical good commercial or motor hotel, few public rooms	*Lighting/plumbing above code, standard fixtures, some extras	Warm and cool air (zoned)	
	Average	84.60	Face brick, metal, concrete or EIFS panels, plain exterior	Plaster/drywall and paint, good car- pet, some built-in extras, support services	*Some good suites, lighting and plumbing fixtures, TV circuits	Heat pump system	
	Low cost	71.00	Brick, concrete block, metal stud panels, little ornamentation	Small lobby, some carpet and tile, typical economy facility	*Minimum lighting/plumbing, few extras	Indiv. thru-wall heat pumps	
	Excellent	111.70	Metal or stone, heat-absorbent or double glazing	Fine detail and carpet, good plaster and wall coverings, some custom suites	*Best lighting, TV circuits, wet bar, top-quality plumbing	Hot and chilled water (zoned)	
	Good	93.90	Face brick, metal or good concrete or stucco panels	Typical good commercial or motor hotel, few public rooms	*Lighting/plumbing above code, standard fixtures, some extras	Warm and cool air (zoned)	
В	Average	81.60	Face brick, metal, concrete or EIFS panels, plain exterior	Plaster/drywall and paint, good car- pet, some built-in extras, support services	*Some good suites, lighting and plumbing fixtures, TV circuits	Heat pump system	
	Low cost	68.20	Brick, concrete block, synthetic plaster, little ornamentation	Small lobby, some carpet and tile, typical economy facility	*Minimum lighting/plumbing, few extras	Indiv. thru-wall heat pumps	
	Excellent	102.00	Metal or concrete panels, stone, brick, individual design	Fine detail and carpet, good plaster and wall coverings	*Excellent lighting, radio and TV circuits, quality plumbing	Warm and cool air (zoned)	
C	Good	84.35	Brick, metal or concrete and glass, good trim and entrance	Typical good motor hotel or all suites, few public rooms	*Lighting/plumbing above code, standard fixtures, some extras	Heat pump system	
	Average	67.05	Block or brick, standard front, small lobby, vending area	Drywall, carpet, vinyl composition, minimum suites, no food services	*Standard fixtures, guest laundry, small lobby restrooms	Indiv. thru-wall heat pumps	
	Low cost	56.45	Brick or concrete block	Painted block, some carpet and tile	*Minimum lighting/plumbing	Indiv. heat pumps	
	Good	81.10	Brick veneer, EIFS, metal and glass, good entrance and trim	Typical good motor hotel or all suites, few public rooms	*Lighting/plumbing above code, standard fixtures, some extras	Heat pump system	
D	Average	64.20	Siding or stucco, standard front, small lobby, vending area	Drywall, carpet, vinyl composition, minimum suites, no food services	*Standard fixtures, guest laundry, small lobby restrooms	Indiv. thru-wall heat pumps	
	Low cost	54.00	Stucco or siding, very plain	Drywall, wood or asphalt tile	*Minimum lighting/plumbing	Indiv. heat pumps	
S	Average	61.50	Insulated panels, some ornamentation	Drywall, carpet and vinyl composition, breakfast hospitality area only	*Adequate lighting and plumbing, TV circuits, some good fixtures	Indiv. thru-wall heat pumps	

For basements, see CAL 94 Hotels - Full Service.

EXCL.

HOTELS – LIMITED SERVICE

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deduct the following fror	n the base o	costs so marked. For detailed c	5,000	\$2.25	\$2.85	\$3.65	\$4.70	
Section UIP 8.			10,000	2.00	2.55	3.25	4.10	
Classes A/B	Sq. Ft.	Classes C/D/S	Sq. Ft.	20,000	1.80	2.25	2.85	3.60
	Costs		Costs	50,000	1.55	1.95	2.45	3.05
Excellent	\$3.65	Excellent	\$2.20	100,000	1.40	1.75	2.15	2.65
Good	3.10	Good	1.60	200,000	1.25	1.55	1.90	2.35
Average	2.60	Average	1.20	500,000	1.10	1.35	1.60	1.95
Low cost	2.20	Low cost	.85					

ELEVATOR STOPS: For basement stops, add \$4,250 to \$6,450 per stop. CANOPIES: Large entrance carport canopies generally cost 1/4 to 2/5 of the final cost per square foot of the building

BALCONIES: Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs. For pool enclosures, see Page CAL 144.

AVG.

GOOD

SPRINKLERS: Apply to sprinklered area.

LOW

Sq. Ft.

HEATING AND COOLING

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard	\$3.55	Package A.C. (short ductwork)	\$ 7.00	Central refrigeration (zoned)	\$5.70
Electric wall heaters	1.40	Warm and cool air (zoned)	9.75	package (short ductwork)	3.95
Forced air furnace	4.55	Hot/chilled water (zoned)	15.40	Central evaporative	2.70
Hot water, baseboard/convector	6.75	Heat pump system	7.95	Pkg. refrig \$1,200 to \$1,575 per tor	n capacity
radiant floor/ceiling	7.05	Ind. thru-wall heat pumps	3.50	Evap. coolers . \$155 to \$240 per MCFN	1 capacity
Steam (including boiler)	6.10				
without boiler	5.40	Small indiv. heat pumps cost \$1,075 to \$1	.475 per	VENTILATION ONLY	
Wall or floor furnace	1.55	ton of rated capacity.	, 1	Vent. (blowers/ducts)	\$1.10

HEIGHT REFINEMENTS

MULTISTORY BUILDINGS: Up to 30 stories, add .5% (1/2%) for each story over three, above ground, to all base costs; over 30, add .4% (4/10%) for each additional story.

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

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8	.95	12	1.06
9	.97	13	1.08
10	1.00 (base)	14	1.11
11	1.03		

4	Average Floor Area	AVERAGE PERIMETER											Average Floor Area			
	Sq. Ft./Story	250	300	350	400	450	500	550	600	700	800	900	1000	1100	1200	Sq. Ft./Story
	4,000	.99	1.02	1.05	1.08	1.11										4,000
	6,000	.94	.96	.98	1.00	1.02	1.04	1.06								6,000
	8,000		.93	.94	.96	.97	.99	1.01	1.02	1.05						8,000
	10,000			.92	.94	.95	.96	.97	.98	1.01	1.03					10,000
	12,000			.91	.92	.93	.94	.95	.96	.98	1.00	1.02				12,000
	16,000				.90	.91	.91	.92	.93	.94	.96	.97				16,000
	20,000						.90	.90	.91	.92	.94	.95	.96	.97		20,000
	24,000						.89	.89	.90	.91	.92	.93	.94	.95	.96	24,000
	28,000							.89	.89	.90	.91	.92	.92	.93	.94	28,000
	32,000								.88	.89	.90	.91	.91	.92	.93	32,000
	36,000								.88	.89	.89	.90	.91	.91	.92	36,000
	40,000									.88	.89	.89	.90	.90	.91	40,000